

CLAIMS:

1. A water deflector for use with a nozzle having a water channel including a water inlet and a mouth from which water is dispersed, the water deflector comprising:

5 a shaft for passing through the water channel of the nozzle, the shaft having a lower end and an outer end; and

a base member connected to the shaft at the lower end thereof, the base member having a width sufficiently large to prevent, in use, the base member from entering the water inlet of the water
10 channel;

wherein a portion of water passing through the water channel is deflected by the water deflector to alter the pattern of watering about the nozzle.

15 2. A water deflector as claimed in claim 1 wherein the shaft is in the form of an elongate flat plate.

3. A water deflector as claimed in claim 1 wherein the base member comprises a substantially linear flat plate member.

20 4. A water deflector as claimed in claim 1 wherein the base member ranges in shape from a substantially linear to a substantially circular member.

25 5. A water deflector as claimed in claim 1 further comprising a

flange mounted on the shaft above the base member, the flange in use positioning the shaft optimally within the water channel.

6. A water deflector as claimed in claim 1 wherein the shaft is configured with respect to its length and shape so as to provide optimal water distribution for the pattern of watering about the nozzle.

7. A water deflector as claimed in claim 6 wherein the optimal distribution comprises a substantially consistent and even distribution of water over the pattern of watering.

8. A water deflector as claimed in claim 1 further comprising an aperture along a part of the shaft between the lower and outer ends.

9. A water deflector as claimed in claim 8 wherein the aperture comprises an elongate slot formed in the shaft near the upper end thereof, such that the slot is formed at a position wherein it will be located at or near the mouth of the nozzle.

10. A water deflector as claimed in claim 1 wherein the shaft is bent near its end opposite that of the base member in an arcuate form.

11. A water deflector as claimed in claim 1 wherein the water deflector is comprised of a material selected from the group consisting of metal, non-ferrous metal, composite material and plastic.

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12. A water deflector as claimed in claim 1 comprising a plurality of shafts superimposed with respect to each other.

10 13. A water deflector as claimed in claim 1 wherein the end of the shaft opposite that of the base member has a forked configuration.

14. A water deflector as claimed in claim 1 wherein the end of the shaft opposite that of the base member has a flared configuration.

15 15. A water deflector as claimed in claim 1 wherein the aperture comprises a slot extending along the shaft all the way to the end thereof such that the shaft comprises a pair of independently movable arms.

20 16. A nozzle comprising:

a water channel having an inlet end for receiving water from a source and an outlet end from which the water is discharged to an area adjacent the nozzle; and

25 a water deflector comprising a substantially flat shaft at the outlet end and means for securing the shaft to the nozzle.

17. A nozzle as claimed in claim 16 wherein the shaft comprises a first end attached near the outlet end of the water channel, and a second end remote from the outlet end.

5 18. A nozzle as claimed in claim 16 wherein the shaft further comprises a base member, the base member being located outside the water channel at the inlet end thereof and connected to an end of the shaft, the shaft further comprising a flange within the water channel for optimal positioning of the shaft within the water
10 channel.

19. A nozzle as claimed in claim 16 wherein the shaft comprises an aperture to permit flow of water therethrough.

15 20. A nozzle as claimed in claim 19 wherein the aperture is an elongate slot.

21. A water deflector as claimed in claim 1 wherein no flanges are located on the shaft.

20 22. A nozzle as claimed in claim 16 wherein the water deflector is attached to the nozzle.

23. A nozzle comprising:

25 a water channel having an axis, the water channel having an inlet end for receiving water from a source and an outlet end from

which the water is discharged to an area adjacent the nozzle; and
a water deflector comprising a plurality of apertures at or
near the outlet end of the water channel, each aperture being
dimensioned and oriented in the nozzle to discharge water therefrom
5 at a different angle relative to the nozzle.

24. A nozzle as claimed in claim 23 comprising three apertures
formed in the water channel.

10 25. A nozzle as claimed in claim 24 wherein the three apertures
comprise a first upper aperture configured to discharge water
upwardly from the nozzle, a second middle aperture configured to
discharge water substantially perpendicular to the axis and a third
lower aperture configured to discharge water downwardly from the
15 nozzle.

26. A nozzle as claimed in claim 25 wherein the upper aperture is
larger than the middle aperture and the middle aperture is larger
than the lower aperture.

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27. A nozzle as claimed in claim 23 further comprising a deflector
in the water channel associated with at least one of the apertures.

28. A nozzle as claimed in claim 26 further comprising a deflector
25 in the water channel associated with the middle aperture and a

deflector in the water channel associated with the lower aperture.

29. A nozzle comprising a body defining a water channel, the water channel having an inlet end for receiving water from a source and
5 an outlet end from which the water is discharged to an area adjacent the nozzle, the outlet end comprising at least one slot formed in the body of the nozzle and a plate secured within the slot, the plate having a predetermined aperture configuration therein for directing water discharged through the plate in a
10 selected pattern.

30. A nozzle as claimed in claim 29 wherein the outlet end comprises three substantially equispaced slots formed radially on the body of the nozzle.

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31. A sprinkler head, the head comprising:

a threaded base;

a body comprising a water channel, the water channel having a lower end and an upper end, the lower end terminating at the base and open so as to accept a portion of the water entering the base,
20 the upper end extending to a nozzle member, such that all openings in the nozzle member are supplied with water traveling through the water channel, the nozzle member comprising a top surface, a bottom surface, and at least one side surface, the bottom surface having
25 at least one hole extending toward the top surface, the hole

aligned with the water channel so as to accept at least a portion of the water traveling through the water channel, the nozzle member containing one or more openings through which water from the water channel may exit, the openings comprising an aperture extending
5 from an exterior wall of a nozzle side surface to an interior wall so as to create a passage therebetween for water traveling through the water channel and into the hole or holes, allowing the water to exit;

water volume adjustment means comprising a threaded screw with
10 a slotted end for turning the screw with a screwdriver or other instrument, and a sufficiently large opposite end to seal the base from water entering it when the screw is turned to its lowest position; and

a cap.